



CO. 1  
ORIGIN 1

# SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Kavanaugh, William M.  
Williams, Lewis T.
- (ii) TITLE OF INVENTION: Binding Sites for Phosphotyrosine  
Binding Domains
- (iii) NUMBER OF SEQUENCES. 74
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Townsend and Townsend and Crew LLP
  - (B) STREET: Two Embarcadero Center, 8th Floor
  - (C) CITY: San Francisco
  - (D) STATE: California
  - (E) COUNTRY: USA
  - (F) ZIP: 94111-3834
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 09/894,967
  - (B) FILING DATE: 27-JUN-2001
  - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 08/423,646
  - (B) FILING DATE: 14-APR-1995
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Serafini, Andrew T.
  - (B) REGISTRATION NUMBER: 41,303
  - (C) REFERENCE/DOCKET NUMBER: 2307K-059110
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 415-326-2400
  - (B) TELEFAX: 415-326-2422

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 5 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: Region
  - (B) LOCATION: one-of(2)

(D) OTHER INFORMATION: /note= "Xaa is Leu or Ala."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(3)

(D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine  
or analogs thereof, Glu, Thr, Asp, Gln, Ala or  
Phe."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(4)

(D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine  
or analogs thereof."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(5)

(D) OTHER INFORMATION: /note= "Xaa is Trp, Leu, Ser, Phe or Gln."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Asn Xaa Xaa Xaa Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 6 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(1)

(D) OTHER INFORMATION: /note= "Xaa is Asp, Ser, Glu or Ala."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(3)

(D) OTHER INFORMATION: /note= "Xaa is Leu or Ala."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(4)

(D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine  
or analogs thereof, Glu, Thr, Asp, Gln, Ala or  
Phe."

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(5)

(D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine  
or analogs thereof."

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6)
- (D) OTHER INFORMATION: /note= "Xaa is Trp, Leu, Ser, Phe or Gln."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Xaa Asn Xaa Xaa Xaa Xaa  
 1 5

## (2) INFORMATION FOR SEQ ID NO:3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(3)
- (D) OTHER INFORMATION: /note= "Xaa is Leu or Ala."

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(4)
- (D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine or analogs thereof, Glu, Thr, Asp, Gln, Ala or Phe."

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(5)
- (D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine or analogs thereof."

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6)
- (D) OTHER INFORMATION: /note= "Xaa is Trp or Phe."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Asp Asn Xaa Xaa Xaa Xaa  
 1 5

## (2) INFORMATION FOR SEQ ID NO:4:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(3)
- (D) OTHER INFORMATION: /note= "Xaa is Leu or Ala."

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(4)
- (D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine or analogs thereof, Glu, Thr, Asp, Gln, Ala or Phe."

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(5)
- (D) OTHER INFORMATION: /note= "Xaa is Tyr, phosphotyrosine or analogs thereof."

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6)
- (D) OTHER INFORMATION: /note= "Xaa is Trp or Phe."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Glu Asn Xaa Xaa Xaa Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(7)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Gln Asn Ser  
1 5 10

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12 amino acids
- (B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Ala	Phe	Asp	Asn	Leu	Xaa	Tyr	Trp	Asp	Gln	Asn	Ser
1				5					10		

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6,7)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Ala	Phe	Asp	Asn	Leu	Xaa	Xaa	Trp	Asp	Gln	Asn	Ser
1				5					10		

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Gln Asn

1                      5                      10                      15

Ser Ser Glu Gln Gly

20

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Tyr Trp Asp Gln Asn

1                      5                      10                      15

Ser Ser Glu Gln Gly

20

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Trp Asp Gln Asn

1                      5                      10                      15

Ser Ser Glu Gln Gly

20

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Pro	Ala	Phe	Ser	Pro	Ala	Ala	Asp	Asn	Leu	Tyr	Xaa	Trp	Asp	Gln	Asn
1				5					10					15	
Ser	Ser	Glu	Gln	Gly											
					20										

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Pro	Ala	Phe	Ser	Pro	Ala	Ala	Asp	Asn	Leu	Xaa	Tyr	Trp	Asp	Gln	Asn
1				5					10					15	
Ser	Ser	Glu	Gln	Gly											
					20										

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Pro Ala Phe Ser Pro Ala Ala Asp Asn Leu Xaa Xaa Trp Asp Gln Asn  
 1                      5                      10                      15

Ser Ser Glu Gln Gly  
                     20

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Pro Ala Phe Ser Pro Ala Phe Ala Asn Leu Tyr Xaa Trp Asp Gln Asn  
 1                      5                      10                      15

Ser Ser Glu Gln Gly  
                     20

(2) INFORMATION FOR SEQ ID NO:15:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Pro Ala Phe Ser Pro Ala Phe Ala Asn Leu Xaa Tyr Trp Asp Gln Asn  
 1                      5                      10                      15



Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(11,12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Pro Ala Phe Ser Pro Ala Phe Ala Asn Leu Xaa Xaa Trp Asp Gln Asn  
1 5 10 15

Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:17:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Pro Ala Phe Ser Pro Ala Phe Ser Asn Leu Tyr Xaa Trp Asp Gln Asn  
1 5 10 15

Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

Pro Ala Phe Ser Pro Ala Phe Ser Asn Leu Xaa Tyr Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

Pro Ala Phe Ser Pro Ala Phe Ser Asn Leu Xaa Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region

(B) LOCATION: one-of(12)  
(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Ala Tyr Xaa Trp Asp Gln Asn  
1 5 10 15  
Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEO ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region  
(B) LOCATION: one-of(11)  
(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Ala Xaa Tyr Trp Asp Gln Asn  
1 5 10 15  
Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region  
(B) LOCATION: one-of(11,12)  
(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Ala Xaa Xaa Trp Asp Gln Asn  
1 5 10 15

Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:23:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Ala Xaa Trp Asp Gln Asn  
 1                   5                   10                   15

Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:24:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Phe Xaa Trp Asp Gln Asn  
 1                   5                   10                   15

Ser Ser Glu Gln Gly  
20

(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Tyr	Xaa	Phe	Asp	Gln	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Tyr	Phe	Asp	Gln	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Phe Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
          20

```

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Ala Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
          20

```

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Tyr Trp Ala Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly

```

20

## (2) INFORMATION FOR SEQ ID NO:30:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Xaa	Trp	Ala	Gln	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

## (2) INFORMATION FOR SEQ ID NO:31:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Tyr	Xaa	Trp	Asp	Ala	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

## (2) INFORMATION FOR SEQ ID NO:32:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(11)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Tyr	Trp	Asp	Ala	Asn
1				5					10					15	

Ser	Ser	Glu	Gln	Gly
				20

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(11,12)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Xaa	Trp	Asp	Ala	Asn
1				5					10					15	

Ser	Ser	Glu	Gln	Gly
				20

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Region

(B) LOCATION: one-of(12)

(D) OTHER INFORMATION: note= "Xaa is phosphotyrosine."



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Asn Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Tyr Trp Asp Asn Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:36:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Trp Asp Asn Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

## (2) INFORMATION FOR SEQ ID NO:37:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Tyr	Xaa	Asp	Asp	Gln	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

## (2) INFORMATION FOR SEQ ID NO:38:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(11)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Tyr	Trp	Asp	Asp	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

## (2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Xaa	Xaa	Trp	Asp	Asp	Asn
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp	Asn	Leu	Ala	Xaa	Trp	Asp	Gln	Ala
1				5					10					15	
Ser Ser Glu Gln Gly															
20															

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Tyr Trp Asp Gln Ala  
 1                      5                      10                      15  
 Ser Ser Glu Gln Gly  
                     20

## (2) INFORMATION FOR SEQ ID NO:42:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Trp Asp Gln Ala  
 1                      5                      10                      15  
 Ser Ser Glu Gln Gly  
                     20

## (2) INFORMATION FOR SEQ ID NO:43:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Gln Asn  
 1                      5                      10                      15  
 Ala Ser Glu Gln Gly  
                     20

## (2) INFORMATION FOR SEQ ID NO:44:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Tyr Trp Asp Gln Asn
1           5           10           15

Ala Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:45:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Trp Asp Gln Asn
1           5           10           15

Ala Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:46:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Xaa Leu Ala Pro Arg Ala  
1 5 10 15

Gly Thr Ala Ser Gln  
20

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

Glu Gly Thr Pro Thr Ala Glu Asn Pro Glu Xaa Leu Gly Leu Asp Val  
1 5 10 15

Pro Val

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asn  
1 5 10 15

Ser Ser Glu Gln Gly

20

## (2) INFORMATION FOR SEQ ID NO:49:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

Ala	Pro	Leu	Ala	Cys	Ser	Pro	Gln	Pro	Glu	Xaa	Val	Asn	Gln	Pro	Glu
1				5					10					15	
Val Arg Pro Gln Ser															
20															

## (2) INFORMATION FOR SEQ ID NO:50:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

Ser	Pro	His	Asp	Leu	Ser	Pro	Leu	Gln	Arg	Xaa	Ser	Glu	Asp	Pro	Thr
1				5					10					15	
Leu Pro Leu															

## (2) INFORMATION FOR SEQ ID NO:51:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

Thr	Leu	Pro	Leu	Pro	Pro	Glu	Thr	Asp	Gly	Xaa	Val	Ala	Pro	Leu	Ala
1				5					10					15	
Cys Ser Pro Gln															
20															

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 4 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(4)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

Asn Xaa Xaa Xaa  
1

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(7)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:



Leu Leu Ser Asn Pro Thr Xaa Ser Val Met Arg  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 13 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(7)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

Ala Phe Asp Asn Pro Asp Xaa Trp His Phe Arg Leu Phe  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:55:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(6)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

Ile Glu Asn Pro Gln Xaa Phe Ser Asp Ala  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:56:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 12 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (A) NAME/KEY: Region

(B) LOCATION: one-of (7)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

Ser Leu Asp Asn Pro Asp Xaa Gln Gln Asp Phe Phe  
1                   5                   10

(2) INFORMATION FOR SEO ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 4 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region

(B) LOCATION: one-of (4)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

Asn Pro Xaa Xaa  
1

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 4 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region

(B) LOCATION: one-of (4)

(D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

Asn Leu Xaa Xaa  
1

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(11,12)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

Asp	Ser	Trp	Asp	Gln	Asn	Gln	Leu	Phe	Ser	Xaa	Xaa	Ser	Phe	Ala	Pro
1				5					10					15	
Glu Gly Pro Ala Asn															
20															

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Region  
 (B) LOCATION: one-of(4,18)  
 (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

Asp	Ser	Trp	Xaa	Ser	Gln	Asn	Gln	Leu	Phe	Asp	Ser	Phe	Ala	Pro	Glu
1				5					10					15	
Gly Xaa Pro Ala Asn															
20															

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 21 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

Pro Ala Phe Ser Pro Ala Phe Asp Ala Leu Tyr Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:62:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

Pro Ala Phe Ser Pro Ala Phe Asp Gln Leu Tyr Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:63:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asp Leu Tyr Xaa Trp Asp Gln Asn

```

## (2) INFORMATION FOR SEQ ID NO:64:

- ```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 22 amino acids
    (B) TYPE: amino acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: Region
    (B) LOCATION: one-of(13)
    (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Ala Tyr Xaa Trp Asp Gln  
1 5 10 15  
Asn Ser Ser Glu Gln Gly  
20

## (2) INFORMATION FOR SEQ ID NO:65:

- ```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 22 amino acids
    (B) TYPE: amino acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: Region
    (B) LOCATION: one-of(13)
    (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Phe Tyr Xaa Trp Asp Gln  
1 5 10 15  
Asn Ser Ser Glu Gln Gly  
20

## (2) INFORMATION FOR SEQ ID NO:66:

- (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asp Leu Tyr Xaa Ala Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
          20

```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Asp Asn
1           5           10           15

Ser Ser Glu Gln Gly
          20

```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Xaa Trp Asp Gln Ala
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphoserine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Xaa Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Glu Glu Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
           20

```

## (2) INFORMATION FOR SEQ ID NO:71:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Phe Phe Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:72:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

Pro Ala Phe Ser Pro Ala Phe Asp Gln Leu Xaa Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
                20

```

## (2) INFORMATION FOR SEQ ID NO:73:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

## (ix) FEATURE:



- (A) NAME/KEY: Region
- (B) LOCATION: one-of(11,12)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

Pro Ala Phe Ser Pro Ala Phe Asp Asp Leu Xaa Xaa Trp Asp Gln Asn
1           5           10           15

Ser Ser Glu Gln Gly
                20

```

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 6 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Region
- (B) LOCATION: one-of(5)
- (D) OTHER INFORMATION: /note= "Xaa is phosphotyrosine."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

Asp Asn Leu Tyr Xaa Trp
1           5

```